

Application No. 10,531,844
Amendment Dated October 31, 2006
Reply to Office Action of October 12, 2006

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (previously presented) The method of claim 9, further comprising contacting the test MurD enzyme determined to be an activator-independent MurD enzyme with a test compound in the presence of an enzyme substrate and detecting any modulation of enzyme activity by the test compound, wherein a decrease in activity indicates that the compound is an inhibitor of MurD.
- 2.-6. (canceled)
7. (previously presented) The method of claim 1, wherein the enzyme substrates are UDP-MurNac-L-Ala, D-Glutamate and ATP.
8. (previously presented) The method of claim 1, wherein the enzyme is pre-incubated with the test compound before contacting it with the substrates.
9. (previously presented) A method of determining if a MurD enzyme is an activator-independent MurD enzyme comprising:
 - aligning a test MurD enzyme with SEQ ID NO:2, and
 - identifying if the test MurD comprises one or more common amino acid residues with amino acids at position K93, C112, G116, T126, M129, L133, N296, S298 and I422 of SEQ ID NO:2, wherein the presence of one or more common amino acids in the test MurD indicates that the test MurD enzyme is an activator-independent MurD enzyme.